

Technology

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Technology

9-01 INTRODUCTION

The trend in computerization is towards the use of small computers operated on-site, and linked, if necessary to other locations for coordination, data transfer, and data collection. Courts are no exception and should take advantage of the benefits of the trend, which includes availability of technology at lower cost. It is important, however, for individual units to coordinate with other courts and organizations with whom they need to share information and resources to ensure the capability to share that information efficiently and in a timely fashion.

These guidelines are intended to assist court managers in the decisions which need to be made in identifying their need for technology support and to ensure that compatibility with external organizations is maximized.

9-02 DETERMINING THE NEED FOR AUTOMATION

A. Evaluation of Present System

Poor management of existing manual operations is a problem that cannot be resolved by automation. However, when a court's overall efficiency in processing information breaks down, the need for automation and improving the efficiency of people and processes can become readily apparent. Solutions such as adding more judges and clerks cannot resolve long-standing problems. A lack of detailed, accurate, and timely management information can be due to faulty information systems. Court management must undertake an evaluation to determine if alternate techniques (new or enhanced manual procedures, an automated system, or a complementary combination) are needed in the court. The key to a successful evaluation is to exercise patience and not rush into a decision to fully or partially automate. Sufficient time must be invested at these early stages to realize long-term benefits.

B. Analysis of Requirements

Although the most appropriate sequence of performing the various tasks referenced in this section may depend upon the individual court's priorities, one of the first tasks is to perform a thorough requirements analysis. Improper, inaccurate, and/or inefficient office operations will only result in further inaccuracies or inefficiencies if they are not corrected before automating.

1. Who Should Perform the Analysis

The requirements analysis should be performed by a qualified systems analyst, preferably with court experience and the ability to detect, interpret, and compare efficient and inefficient operations. The analyst should also be highly proficient in communication skills and have a substantial background in data processing and systems. An individual with such skills may be made available through the Office of Systems Management.

2. Why Perform an Analysis

A paperflow analysis (which is part of the requirements analysis) enables the court to determine where information originates, who uses it, what is done with the information, and the results of having processed the information in the form of completed records, decisions, information reports, and statistics. Its objective is to help the court develop the most complementary relationships among people, machines, and manual procedures in fulfilling the information processing requirements of the court. It helps the court identify specific problem areas such as bottlenecks, duplications, misuse of court staff, and unnecessary records. It is part of the overall documentation which can be used as a basis for considering the various alternatives for improving the overall efficiency of the court and for educating various people within and outside the court on the nature of court processes, problems, and the need to pursue solutions to those problems.

3. What is Included in the Analysis

The requirements analysis also includes a definition of the purpose of the system, the various applications (modules to be included), the participants within and outside the court organization, the expected life of the system, input and output requirements (detailed and summary), and volumes of data.

Other matters to be considered in determining the need for (and feasibility of) automation encompass availability and sources of funding, security of data, and what impact the automated system will have on the court. These matters are briefly addressed in subsequent chapters.

C. Automation Committee

1. Impact of Automation

Everyone in the court will directly or indirectly contribute to the workability and success of the system, with the court personnel performing key responsibilities to assist in the operation of the system. The automated system will be used to replace a substantial number of the current manually prepared records with more accessible, complete, and accurate records. Large and cumbersome to handle manual records, such as docket books, will become obsolete with the new system.

2. Appointment of Committee

Once the decision has been made to acquire an automated information system in the court, the chief judge may wish to appoint an automation committee to consider available options in the automated systems. The Office of System Management's Committee, for instance, may contribute heavily towards avoiding the need for such an internal court committee.

3. Appointment of Systems Coordinator

The chief judge, on the recommendation of the court administrator or other appropriate designee, should designate at least one individual to coordinate and oversee the entire systems project. The coordinator's initial responsibility is to ensure that all members of the court staff understand what a new system will and will not do for them and what they must do to realize the system's potential benefits.

Selection of a system coordinator should be heavily based upon the individual's knowledge of the operation, ability to communicate well with all concerned, some understanding of the capabilities and benefits of automation, a high degree of diplomacy and tact in dealing with all concerned, and an attitude of dedication and perseverance in the achievement of the system goals.

4. Qualifications of the Coordinator

There are basically two strategies for determining the qualifications of a system coordinator. One is to emphasize background skills in computer operations and programming, placing knowledge of court operations in a lesser position of importance. The other strategy places knowledge of court operations ahead of experience with computers. This second strategy is generally preferred. Coordinators with combined qualifications are difficult to find. Experience indicates, however, that it is easier to learn how to administer the new system than to learn the intricacies of court office operations. There are only modest demands for knowledge of computer hardware and software in the coordinator's tasks. Hiring a computer hardware/ software expert for the job could create a waste of the person's talent and be a potential misfit in this important responsibility. There are exceptions -- particularly in very large courts where technical and managerial responsibilities vary from court to court.

5. Responsibilities of the Coordinator

a. Communicating Implications of Automation with Chief Judge

The degree of success in automating the court will be enhanced if the coordinator and the chief judge communicate frequently and candidly about the systems functions and requirements. The coordinator should take the initiative in discussing the implications of automation with the chief judge and then communicating them to the other judges. The press of other business can sometimes prevent judges from becoming sufficiently informed about the realities of the impact of automation on the court. Delays, misunderstandings, and general inefficiency in the system implementation can be minimized by clear and frequent briefings by the coordinator to all concerned.

b. Becoming Familiar With Individual Views and Attitudes of All Judges

One of the primary goals of the system is to bring case-related information to each judge in a timely a manner as possible. But judicial expectations about automation vary a great deal and may sometimes surpass the system's capabilities. The coordinator should become familiar with each judge's views and attitudes on automation and exercise care in providing advance explanations about a system's capabilities and how those capabilities will personally benefit each judge.

c. Preparing Staff

In addition to communicating with the judges, the coordinator must prepare the court staff for introduction of an automated system. The success of this effort will be directly related to the extent to which the coordinator has a complete grasp of the workings of the court and ancillary functions that contribute to the system. The coordinator can greatly enhance his/her understanding of the information processes through the paperflow analysis even to the point of participating in the analysis as time permits.

1) Training

Members of the court staff who have become used to performing in a certain way, particularly employees with lengthy service in the use of manual processes, will need time and training to adapt to the introduction of automation.

2) Orientation

An early orientation of office staff to automation would be arranged by the coordinator. Members of the staff who have little or no understanding about the nature, concepts, and benefits of automation should be given an opportunity to attend at least brief introductory training sessions on the basics of data processing. Such introductory training constitutes a valuable investment in alleviating fears and promoting positive attitudes towards automation.

9-03 POTENTIAL PROBLEM AREAS IN AUTOMATION

A. Introduction

A number of potential problems can be avoided by thoroughly reviewing the existing flow of paper and processes as referenced above. In doing so, existing workflow problems can be identified and corrected prior to implementation of the new system. It is particularly important to identify points in the current operation at which there tend to be delays in the receipt of information that would offset the advantages of automation. Another important matter to consider is whether or not all of the information required for the automated system is now reaching all entry points at the time and location where it will be entered into the new system.

B. Emphasis on Consequences of Errors

In order to promote the most accurate, complete, and timely processing of information, the coordinator's meetings with the staff should emphasize the consequences of errors. A checklist of required functions could help ensure that those functions have been performed. Whenever errors are made or there is insufficient or inaccurate communication to the judges, confidence in the system may break down resulting in duplicate record keeping to ensure that information needs are fully satisfied.

C. Conflicts with Standards

It is not uncommon for judges to differ in practices and procedures that may conflict with standards established for an automated system. Such differences tend to be matters of habit rather than requirements of the judicial proceedings.

Once they are pointed out, there should be reasonable agreement that while such habits or personal preferences have provided flexibility in a manual system, a practice or procedure which imposes undue demands upon an automated system may also impose undue demands upon the system's efficiency and those responsible for its successful operation. The overall success of the system will be directly related to the extent to which standard and uniform systems can be adopted by all concerned.

D. Personal Concerns

The systems coordinator's regular meetings with the court and staff participants can go a long way in airing personal concerns and related potential problems. It is important that the coordinator point out the implementation of a new system will require additional time and effort on everyone's part. Conversion to the new system will require duties and responsibilities above and beyond the normal call of duty. The conversion will require that selected data on existing and new cases be entered into the new system. The additional responsibility will very likely require that all participants in the system work extra hours from time to time until the system is implemented.

Expressed or implied feelings of resentment will require careful handling on the part of the coordinator. It should be pointed out that the extra time may be considered an investment in the benefits which the system will provide once the system is operational. It is important, however, that the coordinator determine, as nearly as possible, how long the additional demands will be placed upon the staff and keep the staff informed of progress in the conversion.

E. Emphasis on Need for Temporary Duplication in Operations During Conversion

It is advisable and common to continue the manual system throughout the conversion period of the new system. Again, there may be feelings expressed about the additional time requirements and efforts in maintaining duplicate processes and record keeping. It is important that the coordinator emphasize the need for parallel operations until such time as the new system is fully operational and is completely fulfilling the information requirements of the old system which the new system has been designated to fulfill. The coordinator should not attempt to apologize to the staff, however, for a management decision to computerize which has been made in the best interests of the court. The coordinator need only request the cooperation and support of the staff in dealing with the situation the best they can.

9-04 PREPARING FOR INSTALLATION AND IMPLEMENTATION OF THE AUTOMATED SYSTEM

A. Introduction

The overall responsibility for installing and implementing the new system is to be shared by the system coordinator, and the data processing department or the data processing supplier.

B. Surveying Court Space

The systems coordinator should arrange for a survey of the court's space for the most appropriate placement of equipment, communication lines, etc. The amount of work required will vary depending upon such matters as the age and condition of the courthouse, the space available, the location of any existing data processing service, the number and location of offices requiring the service, the size of the computer(s), and the number of peripheral devices (terminals and printers) to be installed at each location.

C. Installing Software

After the hardware is in place, the data processing department (or supplier), in cooperation with the coordinator and data processing manager, will assist in loading the software that the court will use in the automated system. The management of the court should not expect the initial operation of the system to be perfect. Hardware sometimes malfunctions when it is first installed, and some forms of hardware damage may not surface until the software is loaded.

D. Implementing Security Measures

In addition to establishing daily routines, the installation/implementation team must implement security measures involving passwords, levels of file protection, and back-up media. None of these steps is necessarily complex or burdensome, but each takes its share of time and requires careful attention to detail, and, sometimes, several repetitions.

E. Ascertaining Training Levels

The programmer analyst and systems coordinator should ascertain the training levels of the data entry clerks and arrange for additional training as required. The amount of training required will vary depending upon the complexity of the programs the court will use. Depending upon the versatility of the system, the court may wish to utilize such other applications as word processing, spread sheets, and special reports. Such additional applications will require training beyond the basic applications of the system.

F. Maintaining Both Manual and Automated Operations

The period of parallel manual and automated operations should last as long as required to ensure that everyone understands what the new system can and cannot do. As problems are identified, they should be fixed before proceeding further.

G. Validating Case Data

Other matters to be considered in the implementation process include the specific case data to be entered, that is, new case versus old case data and how the validity of historical data and current data will be maintained and monitored. Criteria should be developed for such validations.

H. Phasing Out Manual System

Procedures should be developed to make the final move to the automated system and phase out the manual system. There are a multitude of details in procedure that may be unique to individual court needs and desires which will require thoughtful consideration on the part of all concerned.

9-05 VALIDATING THE NEW AUTOMATED SYSTEM

A. Introduction

If a clerk distributed computer prepared information to a judge that is inaccurate or difficult to interpret, the clerk may risk the future of the system in that court. Embarrassment or worse can be minimized by thorough and continuing attention to data validation. Validation begins with checking the substance of automated data against the same data contained in the manual system.

B. Timeliness

In addition to high level of accuracy, data must be checked for timeliness. Information should also be presented in approximately the same form that the judge is already used to receiving it in. As discussed above, however, judges must also be willing to accept certain inevitable and unavoidable differences in format.

C. Revalidation

Validation is not a one-time process. Staff turnover creates the need for continuing revalidation of data entry tasks and reports. Changes in local or state rules may require new reports or eliminate existing reports. If the court staff diligently examines the quality of data in the system, reliability and credibility of the new system will not be questioned. Such credibility is not easy to gain; it must be earned.

9-06 SERVICES AVAILABLE THROUGH JUDICIAL INFORMATION SYSTEMS

A. Introduction

The State Court Administrative Office's Judicial Information Systems (JIS) provides management assistance to courts in the identification, development, and maintenance of automated information systems, irrespective of the hardware and software the court chooses or is required to use. In addition, JIS provides direct data processing support to the Supreme Court and State Court Administrative Office and to trial courts. Direct services to trial courts include on-line data processing systems for district and probate courts, software and technical support for circuit, district, and probate courts, and a batch case information and monitoring system for probate courts.

Services provided by JIS to courts include, but are not limited to:

1. programming and systems analysis in the development of all court caseflow management systems;
2. operator and other staff training in the use of the system;
3. development and implementation of the system (including specifications);
4. procedural evaluation and documentation;
5. paperflow study and documentation provided at court's request;
6. debugging of the system;
7. coordination of systems with county data processing facilities;
8. coordination of system development and participation in meetings of its court users committee;
9. development of planning and implementation guidelines for automated systems.; and
10. support services in the determination and selection of data processing services, equipment, and software.
11. support services in the acceptance and reformatting of abstract of conviction tapes for submission to Michigan Department of State.

B. Preparing for Automation

Courts may vary significantly in their needs in preparing for automation. JIS will provide an introduction to the tasks of the system prior to implementation. Some courts may already be competent in automation and require minimal assistance. But some courts will require support in developing a detailed plan, including a list of applications and training required in the use of these applications.

C. Training

JIS will provide training in the operation of the automated applications. Some of the new programs will be quite simple to learn; data entry may be directly referenced through a terminal screen menu or from written documentation with a minimum of on-site training from JIS staff. The middle range of programs may require more training for the data entry staff. The coordinator should develop cross-training programs to ensure that sufficiently trained back-up personnel are available.

JIS training consists of a member of JIS staff travelling to the courts to discuss computer and system management fundamentals with judges and members of the court staff, providing assistance as needed. Training for larger groups can be accommodated at the Lansing and Southfield meeting/training sites.

9-07 INTERACTIVE VIDEO TECHNOLOGY

In July 2000 the Michigan Supreme Court entered Administrative Orders 2000-3 and 2000-4 authorizing the State Court Administrator to approve trial courts to use interactive video technology in the criminal divisions of the circuit and district courts, in the family division of circuit court, and in the probate court. The interactive video technology would be used in the criminal divisions of the circuit and district courts to conduct the following proceedings between a courtroom and a prison, jail, or other place of detention: initial arraignments on the warrant, arraignments on the information, pretrials, pleas, sentencing for misdemeanor offenses, show cause hearings, waivers and adjournments of extradition, referrals for forensic determination of competency, and waivers and adjournments of preliminary examinations. The interactive video technology would be used in the family division of the circuit court and the probate court on an experimental basis until July 1, 2002 or until further order of the Supreme Court to conduct proceedings between a courtroom and a hospital, mental health facility, jail, detention facility, or other placement facility, in the following circumstances: 1) hearings concerning initial involuntary treatment and continuing treatment in mental health cases in probate court in the counties of Calhoun, Chippewa, Genesee, Gogebic, Kalamazoo, Livingston, Ottawa, and Wayne; and 2) Preliminary hearings and review hearings in child protective proceedings in the family division of the circuit court in the counties of Calhoun, Chippewa, Genesee, Gogebic, Livingston, Ottawa, and Wayne.

For guidelines on interactive video technology, see the State Court Administrative Office website at: <http://courts.michigan.gov/scao/resources/standards/#ivt>.

Each court requesting authorization must submit a local administrative order to the State Court Administrator under MCR 8.112(B) to implement interactive video technology and prescribe the administrative procedures for each type of hearing in which the technology will be utilized.

(See also Section 1-06, page 1-06-06 or <http://courts.michigan.gov/scao/resources/other/lao.htm#vp>.)

9-08 VIDEO RECORD

In September 1987 the Michigan Supreme Court issued Administrative Order 1987-7 authorizing the Sixth and Ninth Circuit Courts to conduct experimental programs which allowed the record to be created by video tape. On February 27, 1989 the Michigan Supreme Court entered Administrative Order 1989-2 which authorized the expansion of the project for up to ten additional courts. Further expansion of the project was authorized on October 15, 1990 with the entry of Michigan Supreme Court Administrative Order 1990-7, which authorized the State Court Administrator to approve trial courts to use video tape record systems for the purpose of making the verbatim court record of proceedings in individual courtrooms. Trial courts must apply to the State Court Administrative Office for approval prior to installing a video tape record system.

(See also Section 1-06, page 1-06-06, and for the Video Record System Implementation Manual, see <http://courts.michigan.gov/scao/resources/publications/manuals/Video-02-mnl.pdf>)

9-09 FACSIMILE COMMUNICATION EQUIPMENT

In October 1990 the Michigan Supreme Court entered Administrative Order 1990-9 authorizing the State Court Administrative Office to select trial courts to be pilot courts in an experiment to test the use of facsimile transmission of documents. Each of the pilot courts were to establish a local court rule to govern the use of facsimile. Pilot courts could permit the filing of 8 1/2" by 11" pleadings, motions, affidavits, opinions, orders, or other documents by facsimile transmission. Courts could not permit the filing of any document for which a filing fee is required unless the full filing fee had been paid or deposited in advance with the clerk.

Michigan Supreme Court Administrative Order 1994-2 expanded the provisions to permit the use of facsimile communication equipment for the transmission and filing of court documents to all court desiring to receive documents by facsimile. The previous authorizations under Administrative Order 1990-9 are continued until further order of the Court or the State Court Administrative Office.

Under 1994-2, the State Court Administrative Office shall provide assistance in the implementation of the use of facsimile equipment for those courts electing to participate. Participating courts shall cooperate with the State Court Administrative Office and provide information regarding the use of facsimile equipment for the filing and transmission of court documents. Experimental court rules governing the participating courts are outlined in Administrative Order 1994-2. Court interested in the use of facsimile equipment should contact the Central Office of the State Court Administrative Office for instructions regarding submission of a local court rule.

Signature. For purposes of MCR 2.114, a signature includes a signature transmitted by facsimile communication.

Warrants. Facsimile communication equipment and voice communication equipment may be used as provided for in 1990 PA 41, 43, 44, and 45.

(See also Sections 1-06, pages 1-06-02 and 1-06-04 and 10-01, page 10-01-03).

9-10 DIGITAL AUDIO AND VIDEO RECORDING

Under Michigan Court Rule, Supreme Court Administrative Order, and statute the State Court Administrator is responsible for approving recording equipment used in Michigan trial courts. [MCR 8.103, MCR 8.109, AO 1990-7, MCL 600.8611, and MCL 600.859] Accordingly, SCAO developed standards for both audiotape equipment and video recording systems used to record court proceedings.

A list of approved audiotape equipment systems is located at the State Court Administrative Office website at: <http://courts.michigan.gov/scao/resources/other/recordingequip.pdf>. (See Section 10-01 for more details). In May 2000 the State Court Administrative Office extended the audiotape equipment standards to audio recording systems using digital technology by issuing SCAO Administrative Memorandum 2000-05. In 2001, the State Court Administrative Office issued digital video recording systems standards by issuing SCAO Administrative Memorandum 2001-03. A digital audio or video recording system must be certified according to these standards before it can be used to record trial court proceedings.

For a system to be certified, the trial court considering a given system must complete the Digital Audio or Digital Video Recording Systems Standards Checklist verifying that the system meets the minimum standards and submit it to SCAO. Courts are encouraged to work with system vendors to complete the self-evaluation form. SCAO will review the completed checklist and grant approval based upon it. See the standards, glossary, and checklist at the State Court Administrative Office website at: <http://courts.michigan.gov/scao/resources/standards/#audio> or <http://courts.michigan.gov/scao/resources/standards/#video>. Completed checklists should be sent to:

Digital Recording Coordinator
State Court Administrative Office
P.O. Box 30048
Lansing, MI 48909

Courts should develop appropriate policies and procedures governing the use of the systems they purchase. Procedures should be developed for backing up the files created by the system and periodically assessing the quality of the storage medium by testing archived files. A contingency process should also be established for backup or duplication of files in the event of obsolescence. Courts should rely on their vendor for support in developing these policies and should follow the vendor's recommended procedures designed for their specific system.

The Administrative Memorandum and attached standards and checklist are also located in the Trial Court Standards of the State Court Administrative Office, a series of manuals containing all standards for trial courts issued by the State Court Administrative Office.

9-11 COMMUNICATIONS DEVICES AND SYSTEMS

In June of 2000, the State Court Administrator issued SCAO Administrative Memorandum 2000-07 on guidelines for establishing policies and procedures governing internal court use of all communication devices and systems. The Administrative Memorandum and attached model policy and standards are located in the Trial Court Standards of the State Court Administrative Office, a series of manuals containing all standards for trial court issued by the State Court Administrative Office.

When the court is provided any of its systems through its funding unit, the court should establish procedures, written in collaboration with the funding unit, for the control and monitoring of court information to assure that the information is maintained in a protected and confidential manner. Access to the data and its availability to the public should be covered through these rules.

The rules or controls can be established through three alternatives or combination of alternatives: 1) joint policies and procedures agreed upon with the funding unit (see Model Policy for the Operation of Computer Network, Internet Access, E-Mail, Phone Service and Other Communication Equipment and Programs Utilized by the Court); 2) a contract for services between the court and the funding unit; and 3) hardware and software solutions for certain services, such as e-mail and internet access (see SCAO Administrative Memorandum 2000-07, Section B: Computer Hardware and Software Options for Judicial E-mail and Internet Autonomy), with necessary internal operating procedures.

The court is encouraged to adopt standards of operation that conform with those adopted by the funding unit so long as those standards do not interfere with the orderly operation of the court. If the funding unit has no standards, the court should adopt standards consistent with recommendations provided by the State Court Administrative Office (see Standards for Court Operations of Communication Equipment and Programs at the State Court Administrative Office website at: http://courts.michigan.gov/scao/resources/standards/cm_std.pdf).